IN THE CLAIMS:

Please cancel Claims 17 and 27 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 16, 21-23 and 26 as follows.

Claims 1-15. (Cancelled).

16. (Currently Amended) A color-information processing method for displaying a three-dimensional object of color distribution based on sample points, said method comprising:

a color-distribution-information input step, of inputting color coordinate values in a second color system corresponding to sample points in a first color system;

a viewpoint information setting step, of setting viewpoint information according to a user instruction;

a range setting step, of setting a range ~~to be displayed~~ in ~~the~~ color distribution corresponding to the sample points, according to a user instruction;

a step of selecting sample points corresponding to the range from the sample points in the first color system and obtaining the color coordinate values in the second color system corresponding to the selected sample points;

a generation step of generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system

corresponding to the selected sample points and generating color information of the surface of the three-dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points; and

a display step of displaying the three-dimensional object corresponding to the viewpoint information based on the surface information of the three-dimensional-object and the color information of the surface,

wherein the sample points are regularly placed in the form of a grid in the first color system,

wherein the surface information of the three-dimensional object consists of triangles, and

wherein each triangle corresponds to one combination of the triangles selected, such that a volume of the three-dimensional object is increased, from two combinations of triangles generated in each of minimum quadrangles formed by the selected sample points.

Claim 17. (Cancelled).

18. (Previously Presented) A method according to Claim 16, wherein said range setting step sets grid ranges for each color component in the first color system.

Claims 19 and 20. (Cancelled).

21. (Currently Amended) A computer-readable medium encoded with a computer program for executing a color-information processing method for displaying a three-dimensional object of color distribution based on sample points, said program comprising:

a color-distribution-information input step, of inputting color coordinate values in a second color system corresponding to sample points in a first color system;

a viewpoint information setting step, of setting viewpoint information according to a user instruction;

a range setting step, of setting a range ~~to be displayed~~ in ~~the~~ color distribution corresponding to the sample points, according to a user instruction;

a step of selecting sample points corresponding to the range from the sample points in the first color system and obtaining the color coordinate values in the second color system corresponding to the selected sample points;

a generation step of generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points and generating color information of the surface of the three-dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points; and

a display step of displaying the three-dimensional object corresponding to the viewpoint information based on the surface information of the three-dimensional object and the color information of the surface.

wherein the sample points are regularly placed in the form of a grid in the first color system,

wherein the surface information of the three-dimensional object consists of triangles, and

wherein each triangle corresponds to one combination of the triangles selected, such that a volume of the three-dimensional object is increased, from two combinations of triangles generated in each of minimum quadrangles formed by the selected sample points.

22. (Currently Amended) An apparatus for processing color-information for displaying a three-dimensional object of color distribution based on sample points, comprising:

color-distribution-information means for inputting color coordinate values in a second color system corresponding to sample points in a first color system;

viewpoint information setting means for setting viewpoint information according to a user instruction;

range setting means for setting a range ~~to be displayed~~ in ~~the~~ color distribution corresponding to the sample points, according to a user instruction;

a selector to select sample points correspond to the range from the sample points in the first color system and to obtain the color coordinate values in the second color system corresponding to the selected sample points;

a generator for generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points and generating color information of the surface of the three-dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points; and

a display to display the three-dimensional object corresponding to the viewpoint information based on the surface information of the three-dimensional object and the color information of the surface,

wherein the sample points are regularly placed in the form of a grid in the first color system,

wherein the surface information of the three-dimensional object consists of triangles, and

wherein each triangle corresponds to one combination of the triangles selected, such that a volume of the three-dimensional object is increased, from two combinations of triangles generated in each of minimum quadrangles formed by the selected sample points.

23. (Currently Amended) An apparatus for processing color-information for displaying a three-dimensional object of color distribution based on sample points, comprising:

a color-distribution-information device to input color coordinate values in a second color system corresponding to sample points in a first color system;

a viewpoint information setting device to set viewpoint information according to a user instruction;

a range setting device to set a range ~~to be displayed~~ in ~~the~~ color distribution corresponding to the sample points, according to a user instruction;

a selector to select sample points corresponding to the range from the sample points in the first color system and to obtain the color coordinate values in the second color system corresponding to the selected sample points;

a generator for generating surface information of the three-dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points and generating color information of the surface of the three-dimensional object based on the obtained color coordinate values in the second color system corresponding to the selected sample points; and

a display to display the three-dimensional object corresponding to the viewpoint information based on the surface information of the three-dimensional object and the color information of the surface,

wherein the sample points are regularly placed in the form of a grid in the first color system,

wherein the surface information of the three-dimensional object consists of triangles, and

wherein each triangle corresponds to one combination of the triangles selected, such that a volume of the three-dimensional object is increased, from two combinations of triangles generated in each of minimum quadrangles formed by the selected sample points.

Claim 24. (Cancelled).

25. (Previously Presented) A method according to Claim 16, wherein said display step performs pseudo-three-dimensional display of the three-dimensional object of the color distribution.

26. (Currently Amended) A method according to Claim ~~17~~ 16, wherein said range setting step sets an internal layer to be displayed.

Claim 27. (Cancelled).